This How-To manual will answer the following questions:

I.Why should I upgrade my ADSL 515 wireless base station firmware?

2.How do I know which firmware version I have now?

3.How do I know what the latest firmware is?

4.How do I upgrade my ADSL 515 wireless base station with the new firmware?

5.How do I secure my ADSL 515 wireless network?

5.1 How do I set the network security of my wireless base station? 5.2 How do I set the security of my wireless accessories?

1. Why should I upgrade my ADSL 515 wireless base station firmware?

- To fix bugs
- To add new functions



2. How do I know which firmware version I have now?

The current firmware version can be found in the Wireless Base Station. Access the Wireless Base Station with your Internet browser. The default IP address of the base station is <u>http://192.168.2.1</u>. If you don't know the IP address of you base station, refer to chapter 4. Configuring the ADSL Router of the Base station manual.

🗿 http	:// 192 .1	68.2.1	/ - M	icroso	ft Int	tern
Eichier	<u>E</u> dition	<u>A</u> fficha	ge l	Fa <u>v</u> oris	<u>O</u> ut	ils
G -	• •	* 2	6	P	*	8
A <u>d</u> resse	🕘 http:	//192.16	8.2.1			
	рни					

The login screen will appear as shown below. Fill in the password if necessary (by default, no password is needed) and click with the mouse arrow on 'Login'.





Then click with the mouse arrow on 'Status' in the left bottom part of the screen. The status screen of the ADSL 515 will be shown as below.

🕘 http://192.168.2.1/index	.stm - Microsoft Internet Explorer		
Eichier Edition Affichage Fay	zoris <u>O</u> utils <u>?</u>		🦧
3 • O · 🖹 🖻 🐔	🔎 🛧 🐨 🙆 🙆 - 🚳 🖬 - 🦄		
Adresse 🗃 http://192.168.2.1/ind	ex.stm		Solution States
PHILIPS			ADVANCED SETUP
» SETUP WIZARD	Status		<u></u>
SYSTEM			
WAN	You can use the Status screen to s hardware version numbers, any illeg	see the connection status f ial attempts to access your	or the router's WAN/LAN interfaces, firmware and network, as well as information on all DHCP client
LAN	PCs currently connected to your ne	itwork.	
WIRELESS	Current Time: 12/16/2004 12:49	-55 am	
NAT	Current fime: 12/16/2004 12:48:	inb cc:	
ROUTING	INTERNET	GATEWAY	INFORMATION
FIREWALL	ADSL: CONNECTED	IP Address: 192.168.2.1	Nembers of DHCP Clients, 2 255.0 Puntime Code Version:
SNMP	Subnet Mask: 255.0.0.0	DHCP Server: Enabled	0.33 (Oct 21 2004 00:52:38)
UPnP	Gateway: 80.125.73.1 Brimary DNS: 217.10.102.121	Firewall: Disabled	Boot Code Version: 0.65 ADSI Modem Code Version:
ADSL	Secondary DNS: 217.19.192.131	Wireless: Enabled	03.01.02.00A
TOOLS			LAN MAC Address: 00-30-F1-D4-E9-
STATUS	Disconnect		Wireless MAC Address: 00-30-F1-D4-
			E9-D9
			D8
			Hardware Version: 01
			Serial Num: A422027645
	АТМ РУС		
	VC1		
🕘 Terminé			S Internet
🐉 démarrer 🔰 🧭 🥭	😂 🔀 🔿 🥺 🎺 🧐 👰 🔟 Document	1 - Microsof 🛛 🍓 http://192.166	3.2.1/in 🔇 😼 🗊 🚵 21:52

Here you can see the current firmware (Runtime Code) version of your ADSL 515. In this example it is 0.33.



3.How do I know what the latest firmware is?

The latest firmware can be found on the Philips support site <u>http://www.philips.com/support</u>.

Enter the Wireless Base Station model number (ADSL 515 in this example) and click with the mouse arrow on the right arrow button. The model number can be found on the bottom of the ADSL 515 Base Station.

PHILIPS		⊁ Visit Philips Global	⊧ Su
United Kingdom 🗾 Engli	sh		
Contact & Support			
You Are Here: Home > Consumer	Products > Contact & Support > Product Select	tor	
Philips has a wide range Therefore we would ask	of consumer products and we have speci you to select your product first.	ic support & contact information for each produc	t.
Enter model number	ADSL 515		
OR	e.g. <i>SL300i</i> or a (partial) keyword where do I find the type number on my produc	t	
— Select from product ca	ataloque		

Select the Product.

Search results		
MATCHING PRODUCTS f 123 products found	or country: Any country	
Product	Description	Gro
ADSL5151U/08	ADSL515 PSTN USB	Pho
14GX1515/52R	COLOUR TV 14 INCH	ΤV
14GX1515/54R	COLOUR TELEVISION	τv
14GX1515/58R	COLOUR TV 14 INCH	TV
14GX1515/77B	TVC 14inch MONO	ΤV
14GX1515/85R	STANDARD COLOUR	τv
	TELEVISION	







Here you can see the downloadable firmware for your ADSL 515



You can download the file by clicking with the mouse arrow on the file name (English, Zip file in the example).

The following window will appear. Click the 'Save' button to save the new firmware.

File Dov	vnload	\mathbf{X}		
2	Some files can harm your computer. If the file information below looks suspicious, or you do not fully trust the source, do not open or save this file.			
	File name:	adsl5151u_08_fus_eng.zip		
	File type:	WinZip File		
	From:	www.p4c.philips.com		
	Would you like t	c open the file or save it to your computer?		
	Open	Save Cancel More Info		
	🗹 Always ask b	efore opening this type of file		

A Windows 'Save As' window will open allowing you to save the firmware in a particular place.





In this example the new firmware will be saved on the desktop.

Wait until the download has finished and then click on Close. (If the 'Close this dialog box when download completes' is check-marked, the window will close automatically).

Download complete
Download Complete
Saved:
adsib1b1u_U8_tus_eng.zip trom www.p4c.philips.com
Develophele (71 MD is 10 and
Downloaded: 1.71 MB in 13 sec
Download to: C:(Docum(cpwbs054_00_1ds_eng.2p Transfer rate: 135 KB/Sec
Close this dialog box when download completes
Open Open Folder Close

The next chapter explains how to upgrade you Wireless Base Station with the new firmware.

Note: You will need to have an archive extractor software like WinZip or WinRAR installed on your computer to open the firmware file downloaded.



4. How do I upgrade my ADSL 515 wireless base station with the new firmware?

The current firmware version can be found in the Wireless Base Station. Access the Wireless Base Station with your Internet browser. The default IP address of the base station is <u>http://192.168.2.1</u>. If you don't know the IP address of you base station, refer to chapter 4. Configuring the ADSL Router of the Base station manual.

🗿 http	:// 192 .1	68.2.1	/ - Mi	croso	ft Int	tern
<u>F</u> ichier	<u>E</u> dition	<u>A</u> ffichag	e F	a <u>v</u> oris	<u>O</u> uti	ils
G -	• •	* 2	6	\mathcal{P}	*	•
A <u>d</u> resse	🕘 http:	//192.168	.2.1			
	рнп	IDS				

The login screen will appear as shown below. Fill in the password if necessary (by default, no password is needed) and click with the mouse arrow on 'Login'.





Then click with the mouse arrow on 'Tools' in the left bottom part of the screen. The Tools Settings screen of the ADSL 515 will be shown.

	3 · S · 🗷 🖻 🐔	🔑 🧏 🚳 🚱 🔁 - 1				
	Adresse 🕘 http://192.168.2.1/index.stm					
	PHILIPS					
	» SETUP WIZARD	Tools Settings				
	SYSTEM	Tools Sectings				
	WAN	This page allows you				
	LAN					
	WIRELESS					
	NAT					
	ROUTING					
	FIREWALL					
	SNMP					
	UPnP					
	ADSL					
	TOOLS					
	» Configuration Tools					
\mathbb{N}	» Firmware Upgrade					
	STATUS					
	514105					

Click with the mouse arrow on 'Firmware Upgrade'.

Firmware Upgrade			
This tool allows you to upgrade the router firmware using a file provided by us. You can download the latest firmware from http://			
Enter the path and name, or browse to the location, of the upgrade file then click the APPLY button. You will be prompted to confirm the upgrade to complete the process.			
Firmware File			
HELP BEGIN UPGRADE CANCEL			

Now click with the mouse arrow on the "Browse" button and access the place where you've downloaded the latest firmware. (Make sure you've unzipped the firmware from the zip-file).

Select the new firmware file and click on the 'open' button.

Choose file		? 🛛
Look in:	C version 1.00.008	🗢 🗈 📸 📰 -
3	How to upgrade your Wireless Base Station.pdf AR4502GW-A-B7-FWQ_33_b.bin	
My Recent Documents	15	



Firmware Upgrade				
This tool allows you from <u>http://</u>	This tool allows you to upgrade the router firmware using a file provided by us. You can download the latest firmware from http://			
Enter the path and r prompted to confirm	Enter the path and name, or browse to the location, of the upgrade file then click the APPLY button. You will be prompted to confirm the upgrade to complete the process.			
	Firmware File AR4502GW-A-B7-FW_33_b.bin Parcourir			
	HELP BEGIN UPGRADE CANCEL			

Click with the mouse arrow on the 'BEGIN UPGRADE' button to start the firmware upgrade.

Microsoft Internet Explorer	×
Do you wish to continue with the upgrade p	process?
OK Cancel	

Confirm that you would like to upgrade. At the end of the upgrade the ADSL 515 Wireless Base Station will reboot to make the new firmware affective. During the reboot the ADSL 515 Wireless Base Station will not be accessible.

The upgrade process will start and will take as long as $1\frac{1}{2}$ to 2 minutes. A progress bar will be visible at the bottom of the browser.

After an upgrade the ADSL 515 will show the Login Screen. You will need to set your ADSL 515 again with your Internet Provider parameters using the installation CDROM or manually.



5.How do I secure my ADSL 515 wireless network?

To make your wireless network safe, you should turn on the security function.

5.1 How do I set the network security of my wireless base station?

5.1.1 Using the Ethernet cable.

To set your wireless security, access the Wireless Base Station with your Internet browser. The default IP address of the base station is <u>http://192.168.2.1</u>. If you don't know the IP address of you base station, refer to chapter 4. Configuring the ADSL Router of the Base station manual.



The login screen will appear as shown below. Fill in the password if necessary (by default, no password is needed) and click with the mouse arrow on 'Login'.





Then click with the mouse arrow on 'Wireless' in the left middle part of the screen. The Wireless Settings screen of the ADSL 515 will be shown.

http://192.168.2.1/index	stm - Microsoft Internet Explorer	
Hichier Edition Africhage Pay		47
Q • 🖸 · 🗵 📓 🟠	🔑 🛧 📽 🐵 😥 - 🐇 🖬 - 🚳	
Adresse 🙆 http://192.168.2.1/ind	ex.stm	V Eins 🔧 🗸
PHILIPS		
» SETUP WIZARD SYSTEM	Wireless Settings	
WAN	identifier (SSID) and channel number. It also supports d	access point for roaming clients by setting the service set data encryption and client filtering.
LAN		,,
WIRELESS » Channel and SSID » Access Control » Security WEP WPA 802.1X	Enable or disable Wireless module function : ④ Enable	SAVE SETTINGS
NAT		
ROUTING		
FIREWALL		
SNMP		
UPnP		
ADSL		
TOOLS		
STATUS		
e Terminé		Internet
👪 démarrer 🛛 🙆 😂	🐚 🔀 🔿 💁 🅖 📢 😨 📓 Document 1 - Microsof 🛛 🖓 http:	o://192.168.2.1/in

Click with the mouse arrow on Security.





Click on the arrow button to select the 'Allowed Client Type' and choose 'WEP Only', Then click on 'SAVE SETTINGS'. A progress bar will be visible at the bottom of the browser.

Security	
The router can transmit your data securely over the wireless network on your router and wireless client devices. You can choose the allow configure them in the sub-pages.	. Matching security mechanisms must be setup ed security mechanisms in this page and
Allowed Client Type: WEP Only	HELE SAVE SETTINGS CANCEL

The WEP screen will appear as shown below.

🔮 http://192.168.2.1/inde	.stm - Microsoft Internet Explorer	_ 2 🛛
<u>Fichier</u> Edition Affichage F	<u>v</u> oris <u>O</u> utils <u>?</u>	
🔇 Précédente 🔹 🕥 🕤 🖹	2 🏠 😓	
Adresse 🕘 http://192.168.2.1/in	ex.stm	💌 芛 ок
		FTIID
PHILIPS	ADVANCED 5	LIVE
	fi Home	Cogout
» SETUP WIZARD		^
SYSTEM	WEP	
WAN	WEP is the basic mechanism to transmit your data securely over the wireless network. Matching encryptio	n keys
LAN	must be setup on your router and wireless client devices to use wer.	
WIRELESS	WEP Mode 💿 64-bit 🔿 128-bit	
» Channel and SSID	Key Entry Method O Hex O ASCII	
» Access Control	Key Provisioning	
» Security		=
WEP WPA		
802.1X	Static werkey setting	
NAT	10/26 hex digits for 64-WEP/128-WEP	
ROUTE		
FIREWALL		
SNMP	Passphrase	
ADSL	Key 1 010101010	
TOOLS	Key 2 02020202	
STATUS	//	
	Key 3 U3U3U3U3	
	Key 4 04040404	~
🕘 Terminé	🤡 Interi	net



Click with the mouse arrow on '128-bit' for WEP Mode.

WEP Mode	O64-bit	⊙ 128-bit
Key Entry Method	⊙ Hex	O ASCII
Key Provisioning	⊙ Static	ODynamic

Enter your own words in the Passphare field to generate your WEP encryption key.

Static WEP Key Setting	
10/26 hex digits for 64-WEP/128	3-WEP
Default Key ID	1
Passphrase	✓ Your word (1~32 characters)
Key 1	0101010101
Key 2	0202020202
Кеу З	0303030303
Кеу 4	0404040404
	Clear

Then click on 'SAVE SETTINGS'.

D86BE5D1A	
	~
Search Se	

A progress bar will be visible at the bottom of the browser. Your WEP key will be generated during this step.



Click on the 'WEP' menu on the left side to turn back on the WEP screen and read your WEP key.

SYSTEM	
WAN	
LAN	
WIRELESS	
» Channel and SSID	
» Access Control	
» Security	
WEP	
WPA	
802.1X	
NAT	
ROUTE	
FIREWALL	
SNMP	
ADSI	

Read and note down carefully the WEP key, you will need this key to set up your wireless accessories.

Static WEP Key Setting		
10/26 hex digits for 64-WEP/12	8-WEP	
Default Key ID	1 🕶	
Passphrase		(1~32 characters)
Key 1	09144CEB12B255DB9086BE5D1A	
Key 2	09144CEB12B255DB9086BE5D1A	
Кеу З	09144CEB12B255DB9086BE5D1A	
Key 4	09144CEB12B255DB9086BE5D1A	
	Clear	

In this example, the key is '09144CEB12B255DB9086BE5D1A'.



5.1.2 Using the wireless accessory.

To set your wireless security, access the Wireless Base Station with your Internet browser. The default IP address of the base station is <u>http://192.168.2.1</u>. If you don't know the IP address of you base station, refer to chapter 4. Configuring the ADSL Router of the Base station manual.



The login screen will appear as shown below. Fill in the password if necessary (by default, no password is needed) and click with the mouse arrow on 'Login'.



Then click with the mouse arrow on 'Wireless' in the left middle part of the screen. The Wireless Settings screen of the ADSL 515 will be shown.





Click with the mouse arrow on 'WEP' menu on the left side of the screen.

🕘 http://192.168.2.1/index	.stm - Mi
<u>Fichier E</u> dition <u>A</u> ffichage Fay	<u>/</u> oris <u>O</u> ul
3 • 🛇 • 🗵 😰 🏠	🔎 📩
Adresse 🕘 http://192.168.2.1/ind	ex.stm
PHILIPS	
» SETUP WIZARD	Sec
SYSTEM	
WAN	The i setui
LAN	confi
WIRELESS	
» Channel and SSID	Allov
» Access Control	
» Security	
WEP WPA 802.1X	
NAT	
ROUTING	
FIREWALL	
SNMP	



🕙 http://192.168.2.1/inde	c.stm - Microsoft Internet Explorer	_ 0 🛛
Eichier Edition Affichage F	avoris Qutils ?	2
🔇 Précédente 🔹 🕥 🕤 🖹	2 🔣 🕹	
Adresse 🕘 http://192.168.2.1/in	dex.stm	💌 ラ ок
PHILIPS	ADV	ANCED SETUP
» SETUP WIZARD SYSTEM WAN LAN	WEP WEP is the basic mechanism to transmit your data securely over the wireless netw must be setup on your router and wireless client devices to use WEP.	vork. Matching encryption keys
WIRELESS	WEP Mode 💿 64-bit 🛛 128-bit	
» Channel and SSID	Key Entry Method O Hex O ASCII	
» Access Control » Security	Key Provisioning OStatic ODynamic	
WEP WPA 802.1X	Static WEP Key Setting	
NAT	10/26 Nex digits for 64-WEP/128-WEP	
FIREWALL	Default Key ID	
SNMP	Passphrase	haracters)
ADSL	Key 1 01010101	
TOOLS	Key 2 02020202	
STATUS		
	Key 3 03030303	
	Key 4 04040404	~
🕘 Terminé		🤣 Internet

The WEP screen will appear as shown below.

Click with the mouse arrow on '128-bit' for WEP Mode.

WEP Mode	○64-bit	⊙ 128-bit
Key Entry Method	• Hex	OASCII
Key Provisioning	⊙ Static	ODynamic



Enter your own words in the Passphare field to generate your WEP encryption key.

10/26 hex digits for 64-WEP/128-V	WEP
Default Key ID 1	1 💌
Passphrase	✓ Your word (1~32 characters)
Key 1 0)101010101
Кеу 2 О)202020202
Кеу З О)303030303
Кеу 4 О)404040404
	Clear

Then click on 'SAVE SETTINGS'.

J86BE5D1A	
HELP SAVE SETTINGS CANCEL	
	*

A progress bar will be visible at the bottom of the browser. Your WEP key will be generated during this step.

Click on the 'WEP' menu on the left side to turn back on the WEP screen to read your WEP key.



Read and note down carefully the WEP key, you will need this key to set up your wireless accessories.

Static WEP Key Setting						
10/26 hex digits for 64-WEP/128-WEP						
Default Key ID	1~					
Passphrase		(1~32 characters)				
Key 1	09144CEB12B255DB9086BE5D1A					
Key 2	09144CEB12B255DB9086BE5D1A					
Кеу З	09144CEB12B255DB9086BE5D1A					
Key 4	09144CEB12B255DB9086BE5D1A					
	Clear					

In this example, the key is '09144CEB12B255DB9086BE5D1A'.

Click with the mouse arrow on Security.

	🔮 http://192.168.2.1/index	.stm - Mi
	<u>Fichier Edition Affichage Fay</u>	<u>v</u> oris <u>O</u> ut
	3 · O · 🖹 🛢 🐔	🔎 📩
	Adresse 🕘 http://192.168.2.1/ind	ex.stm
	PHILIPS	
	» SETUP WIZARD	Sec
	SYSTEM	_1
	WAN	The i setur
	LAN	confi
	WIRELESS	
	» Channel and SSID	Allov
	» Access Control	
<	» Security	
	WEP WPA 802.1X	
	NAT	
	ROUTING	
	FIREWALL	
	SNMP	

Click on the arrow button to select the 'Allowed Client Type' and choose 'WEP Only', Then click on 'SAVE SETTINGS'. A progress bar will be visible at the bottom of the browser.



Security	
The router can transmit your data securely over the wireless netw on your router and wireless client devices. You can choose the allo configure them in the sub-pages.	rork. Matching security mechanisms must be setup owed security mechanisms in this page and
Allowed Client Type: WEP Only	HELR SAVE SETTINGS CANCEL

This operation will activate the security, at this step your are not able to connect to your wireless base station until you have set your accessory. (See chapter 5.2 How do I set the security of my wireless accessories).

5.2 How do I set the security of my wireless accessories?

Note: If your are not using the Philips WiFi accessory provided with your ADSL 515, please refer to the user manual of this accessory.

Connect your WiFi USB or PC-Card to your computer, the Wireless Network Config Utility will start automatically. (If not, click on Start, choose Run and type 'WlanMon.exe'), Then double click with the mouse arrow on the Wireless Network Config Utility icon.



The Utility Software will be displayed, click on 'Philips' as shown below then click on properties.

Wi	reless Network Co	onfig Utility						×
	Configuration Status Option About							
	To connect to availab	le WLAN, click Add to se	etup.		[R <u>e</u> fresh	A <u>d</u> d	
	SSID	MAC(BSSID)	Si $ abla$	Security	CH	Freq	Mode 🔼	
	1 Philips	00:30:F1:D4:E9:B5	a 100%	₩EP	6	2.437Ghz	g	
	- Profile <u>G</u> roup Control- Please select a profile	group to apply : Auto	ferred WLAN matically cor	s: mect to available W	/LAN per b	elow order:	<u>N</u> ew	
		New	SSID	Secur Open S	ity System		<u>R</u> emove	
		Hena <u>m</u> e Delete				V	Properties Move to	2
		Select					Re <u>C</u> onnect	
				C	к	Annuler	Appliquer	



The screen below will be displayed.

Wireless Network Properties 🛛 🛛 🛛						
Wireless network <u>n</u> ame (SSID): Philips						
Wireless network key (WEP) This network requires a key for the following:						
Authentication	n Mode:	Open System	•			
Data <u>E</u> ncrypti	on:	Disable	•			
Key jength:	64 b	oits (40+24) - 10 He	xadecimal d 💌			
Key <u>1</u> :	*****					
Key <u>2</u> :	*****					
Key <u>3</u> :	*****					
Key <u>4</u> :	******					
Default <u>k</u> ey:	Key 1	-				
🗖 Enable 80)2.1 <u>×</u>	Authent	ication Config			
This is a computer to computer (ad <u>h</u> oc) network; no access points are used.						
I <u>P</u> & Proxy Se	etting	<u>0</u> K	<u>C</u> ancel			

Set the 'Data Encryption:' field to WEP

This network requires a key for the following:					
Authentication Mode:	Open System 💌				
Data Encryption:	Disable				
Key length:	Disable WEP				

Set the 'Key length:' field to 128 bits (104+24) - Hexadecimal digits

Key length:	64 bits (40+24) - 10 Hexadecimal d 💌
	64 bits (40+24) - 10 Hexadecimal digits
Key <u>1</u> :	***** 128 bits (104+24) - 26 Hexadecimal dig
<i>w</i>	64 bits (40+24) - 5 ASCII digits
Key <u>2</u> :	128 bits (104+24) - 13 ASCII digits
Keu 3:	******
ксу <u>о</u> .	
Koult	*******

Then fill in the 'Key I' field with the WEP key noted above (See chapter 5.1 How do I set the security of my wireless base station network?).



Apply the setting by clicking on OK.



The Utility Software is now displayed as shown below.

Wireless Network C	onfig Utility					×
Configuration Status	Option About					
To connect to availab	ole WLAN, click Add	l to setup.		(R <u>e</u> fresh	Add
SSID	MAC(BSSID)	Signal	Security	CH	Freq	Mode
💡 philips	00:30:F1:D4:E9:	D9 🔊 88%	🗪 WEP	6	2.437Ghz	g
Profile <u>G</u> roup Control Please select a profile	group to apply :	Preferred WLAN	s: nnect to available ^v	wLAN per be	slow order:	<u>N</u> ew
		P philips	🕬 Open	System		
	Hename				- Inni -	Properties
	Delete					Move to
	<u>S</u> elect				-	Re <u>C</u> onnect
				ок	<u>C</u> ancel	

Apply the settings by clicking on the 'Apply' button.

Your wireless network is now secured with a WEP encryption.

